CONTENTS OF VOLUME 66

NUMBER 1—10 JANUARY

PAGE

Design of causal reversed-frame-normalizing controllers using bicausal expansions
J. C. BASILIO and B. KOUVARITAKIS 1

$\mathscr{H}_\infty$ filtering via convex optimization
P. PARK and T. KAILATH 15

On-line identification of continuous time-delay systems combining least-squares techniques with a genetic algorithm
Z.-J. YANG, T. HACHINO and T. TSUJI 23

Robust control of sampled-data uncertain systems using digitally redesigned observer-based controllers
L.-S. SHIEH, W.-M. WANG and J.-B. ZHENG 43

On digital high-gain and sliding-mode control
S.-T. WU 65

Neural-net-based direct self-tuning control of nonlinear plants
M. S. AHMED and M. F. ANJUM 85

On the upper and lower bounds of the solution for the continuous Riccati matrix equation
C.-H. LEE 105

State-space realizations of multi-input multi-output systems—elementary operations approach
K. GAŁKOWSKI 119

Bounded real lemma for linear systems with finite discrete jumps
P. SHI, C. E. DE SOUZA and L. XIE 145

Infinite horizon generalized predictive control
P. O. M. SCOKAERT 161

NUMBER 2—20 JANUARY

(J, J')-lossless conjugations, (J, J')-lossless factorizations and chain scattering approach to time-varying H^∞ control: one and two-block cases
P. H. LEE, H. KIMURA and Y. C. SOH 177

J-lossless conjugations and J-lossless factorizations of exponentially stable time-varying systems
P. H. LEE, H. KIMURA and Y. C. SOH 199

Disturbances attenuation for interconnected systems by decentralized control
C.-F. CHENG 213

Multiobjective control for multivariable systems with mixed-sensitivity specifications
J. STROUSTRUP and H. NIEMANN 225

PAGE

H_∞ control attenuating initial-state uncertainties
K. UCHIDA, A. KOJIMA and M. FUJITA 245

Singular perturbation approximation of bounded real balanced and stochastically balanced transfer matrices
G. MUSCATO, G. NUNNARI and L. FORTUNA 253

A model reference learning control scheme for a class of nonlinear systems
C. C. CHEAH and D. WANG 271

The sampled-data H_∞ problem: a unified framework for discretization-based methods and Riccati equation solution
H. T. TOIVONEN and M. F. SÄGFORS 289

Improved method of determining time-domain transient performance bounds from frequency response uncertainty regions
C. J. PRITCHARD and B. WIGDOROWITZ 311

On the determination of time-domain signal levels at the specification stage in quantitative feedback theory controller synthesis
C. J. PRITCHARD and B. WIGDOROWITZ 329

NUMBER 3—FEBRUARY

Implementation of wind turbine controllers
D. J. LEITH and W. E. LEITHEAD 349

Frequency-domain performance bounds for uncertain structures with sensor and actuator dynamics
W. M. HADDAD, E. G. COLLINS, JR, D. C. HYLAND and V.-S. CHELLABOINA 381

Implicit Kalman filtering
M. SKLIAR and W. F. RAMIREZ 393

Nonlinear coprime factorizations and parametrization of a class of stabilizing controllers
L. BARAMOV and H. KIMURA 413

On a state-space approach in robust control for singularly perturbed systems
H. D. TUAN and S. HOSOE 435

Parameter-dependent model order reduction
Y. HALEVI, A. ZLOCHEVSKY and T. GILAT 463

NUMBER 4—10 MARCH

A note on pole assignment in uncertain systems
M. T. SÖYLEMEZ and N. MUNRO 487

Robust output regulation for linear systems with structured uncertainty
H. IMAI 499

PAGE

Design of two-degree-of-freedom robust controllers for a seeker scan loop system
H.-P. LEE and H.-Y. HWANG 517

Frequency-domain synthesis of hereditary control systems via anisochronic state space
P. ZÍTEK 539

A convex programming approach to H_2 control of discrete-time markovian jump linear systems
O. L. V. COSTA, J. B. R. DO VAL and J. C. GEROMEL 557

Robust decentralized control of power systems utilizing only swing angle measurements
S. JAIN and F. KHORRAMI 581

Functional observer and state feedback for input time-delay systems
Y. X. YAO, Y. M. ZHANG and R. KOVACEVIC 603

NUMBER 5—20 MARCH

Design and analysis of gain-scheduled control using local controller networks
K. J. HUNT and T. A. JOHANSEN 619

Stabilization of systems with input constraints
N. KAPOOR and P. DAOUTIDIS 653

Pole assignment and controllability subspaces in descriptor systems
L. R. FLETCHER 677

Parameter set estimation algorithms for time-varying systems
J. WATKINS and S. YURKOVICH 711

Time-delayed state and unknown input observation
J. JIN, M.-J. TAHK and C. PARK 733

On discrete-time H^∞ problem with a strictly proper controller
L. MIRKIN 747

A parametrization of all observers for descriptor systems
N. MINAMIDE, Y. FUJISAKI and A. SHIMIZU 767

NUMBER 6—APRIL

Robust control for a nonlinear servomechanism problem
N. A. MAHMOUD and H. K. KHALIL 779

Robust servo problem with $\mathscr{H}_\infty$ norm constraint
J. HOZUMI, S. HARA and H. FUJIOKA 803

Robust input to state stabilization for minimum-phase nonlinear systems
W. SU, L. XIE and Z. GONG 825

Robust nonlinear-nonquadratic feedback control via parameter-dependent Lyapunov functions
W. M. HADDAD and V.-S. CHELLABOINA 843

PAGE

Improving control design for nonlinear parametric uncertainty
B. H. WILSON, B. ERYILMAZ and B. SHAFAI 863
Observation of qualitative states by means of a qualitative model
G. LICHTENBERG and J. LUNZE 885
Design and analysis of simple robust controllers
R. PROKOP and J.-P. CORRIOU 905
Identification of Wiener-type nonlinear systems in a noisy environment
A. D. KALAFATIS, L. WANG and W. R. CLUETT 923
On nonlinear continuous observers
X. XIA and M. ZEITZ 943
Subject Index 955
Author Index 957